• COLORADO RIVER •

AQUEDUCT NEWS

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Vol. III. SEPTEMBER 10, 1936 No. 17

Completed portion of Eagle Mountain Siphon. Excavation for pumping plant at eastern end of the siphon is now under way.

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AQUEDUCT NEWS
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

LOS ANGELES, CALIFORNIA

Published twice monthly in the interest of Field and Office Workers on the Colorado River Aqueduct, and for the information of all other citizens of the Metropolitan Water District.

Vol. III September 10, 1936 No. 17

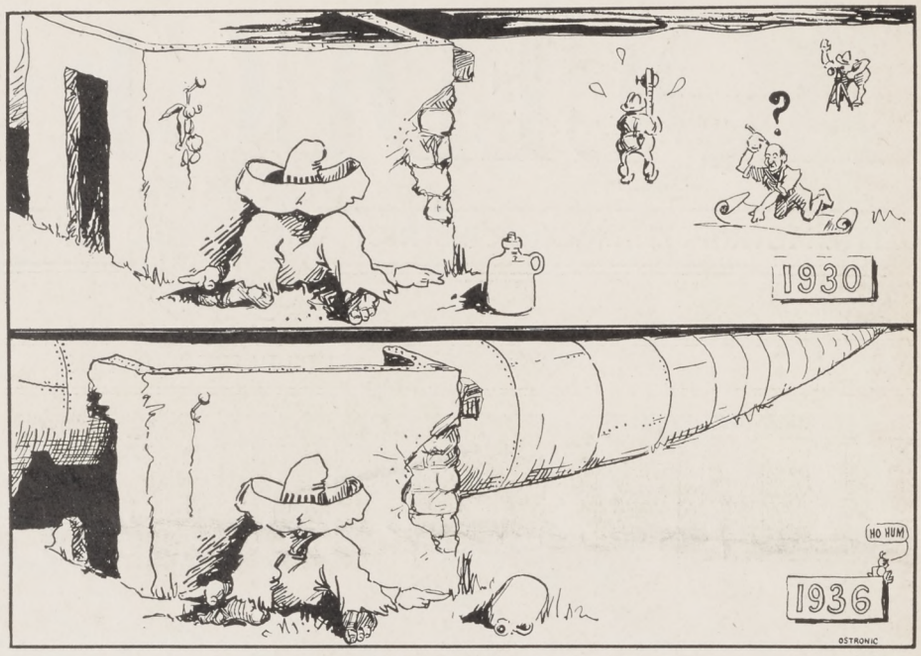
Long Canyon Crews Make New Placing Record

The cold, black, and somewhat impersonal figures of the Construction Progress tables of the NEWS, do not always highlight some of the events on the big job that are making construction history. One of these red letter feats is the consistent speed that the crews at Long Canyon have been making in the placing of concrete lining.

During the week ending August 15, District force account crews under the direction of Superintendent Kenneth MacIsaac placed a total of 1689 feet of arch in the Long Canyon tunnel of the West Coachellas in 17 shifts. This is a new speed record for this type of construction on the Aqueduct. Using a two-yard Pumpcrete, an average of 99.3 lineal feet per shift was poured. The only other "average feet per shift" record in excess of this figure was made at Whipple Mountain during the week ending May 9, 1936, when the Walsh Construction Company crews averaged 103.7 feet per shift. This was only for a total of six shifts, however, so that Long Canyon can safely claim the blue ribbon.

The men responsible for this excellent progress were working under direction of "Ed" Noon, day walker; H. M. Fountain, night walker, and H. E. Lannan, W. A. Baker and "Dick" Kravetz, shifters. E. R. Bennett is the resident inspector on the work.

Started on June 12, 1936, the placing of the 15,305 feet of arch in the Long Canyon tunnel was completed on August 29. This included placing the arch in 35 feet of modified conduit at the eastern end of the tunnel.



TIME MARCHES ON

A pen and ink editorial drawn by Frank J. Ostronic of the Los Angeles office of the Distribution Division.

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(Main Aqueduct Tunnels)

Colorado River, Copper Basin and Whipple Mt. Tunnels, Walsh Construction Co., W. A. Huntington and L. M. Ramey, Tunnel Supts.

Coxcomb East and Iron Mt. tunnels, Winston Bros., E. A. Bernard, Gen. Supt.; F. T. Hillman and R. V. Johnson, Tunnel Supts.

Iron Mt. Tunnel, West Portal, Utah Construction Co., Ben Arp, Gen. Supt.

East Eagle Mt. Tunnel and West Eagle Mt. Tunnel, east portion, Broderick & Gordon, John Will, Gen. Supt.

Coachella Tunnel, Dist. Force Acct., R. C. Booth, Gen Supt.

Berdoo Camp, East Coachella Tunnel, Concrete, John Austin, Supt.

Fan Hill, Thousand Palms Tunnel, Concrete, V. T. Davis, Supt.

Thousand Palms Siphon, M. Hjalmarson, Supt.

Long Canyon and Wide Canyon Tunnels, Concrete, Kenneth MacIsaac, Supt.

Little Morongo, Excavation, R. Ferry, Supt.

San Jacinto Tunnel, District Force Acct., B. C. Leadbetter, Gen. Supt.; A. L. Simpson, Neil O'Donnel and C. E. Sides, Tunnel Supts.; Chas. F. Thomas, Jr., Gen. Foreman.

Valverde Tunnel, Dravo Contr. Co., R. W. Remp, Gen. Supt.; H. C. Richardson, Asst. Gen. Supt.; Fred Youmans, Tunnel Supt.

(Distribution Tunnels)

Monrovia tunnels Nos. 1, 2 and 3, West Construction Co., H. E. Carleton, Gen. Supt.; O. V. Humason, Peter Brisbols and Angus MacDonnell, Tunnel Supts.

Sierra Madre tunnel, J. F. Shea Co., Inc., Edmund H. Shea, Supt.

Pasadena tunnel, San Rafael tunnels Nos. 1 and 2, and Monrovia tunnel No. 4, L. E. Dixon Co., Bent Bros., Inc., and Johnson, Inc., S. D. Hackley, P. C. Guinn and W. N. Evans, Supts.

(Canal, Siphon, Conduit)

Schedules Nos. 1, 1A, 1B, 10, 10A, 10B, 11, 11A, 11B, 11C, 13, 13A, and 13B, Aqueduct Construction Co., S. T. Corfield, Gen. Supt.; Charles Harlowe, Jr., Excav. Supt.

Schedules Nos. 2, 2A, 2B, 3, 3A, 3B, 7 and 7A, Barrett & Hilp and Macco Corp.; H. W. McKinley, Supt.

Schedules Nos. 4, 4A, 5 and 5A, Jahn & Bressi Construction Co., Joseph Muscolo, Gen. Supt.; Dominick Bressi, Asst. Gen. Supt.

Schedules Nos. 6, 8, 8A and 8B, Clyde W. Wood and M. J. Bevanda, A. F. Weesner, Gen. Supt.; L. L. Green, Excav. Supt.; A. V. Fisher and V. S. Price, Concrete Supts.

Schedules Nos. 9, 9A, 9B and 9C, The Utah Construction Co., Ben Arp, Gen. Supt.; E. C. Caldwell, Excav. Supt.

Schedules Nos. 12 and 12A, Three Companies, Inc., C. J. Kavanagh, Supt.

Schedules Nos. 14, 15 and 16, Thompson-Starrett Co., Inc., Rodney Smith, Resident Engineer; William Hayes, Excav. Supt.

Schedule 17, Dist Force Acct., H. Hjalmarson, Supt., (Fan Hill).

Schedule 18J, Morrison-Knudsen, J. O. Young, Gen. Supt.

Schedules Nos. 18, 19 and 20, J. F. Shea Co., Inc., H. F. Rennebohm, Supt.

Schedules Nos. 20A, 20B, 20C. 21, 22 and 23, The Griffith Co., Harry Davis, Supt.

(Distribution Pipe Line)

Schedules No. 4P & 5P, American Concrete & Steel Pipe Co., Wm. A. Whiting, Gen. Supt.; D. H. Rankin, Plant Supt.; J. C. Connell, Const. Supt.

Schedules 6P & 7P, J. F. Shea Co., Inc., Gilbert Shea, Gen. Supt.; Don Lind, Plant Supt.

Schedule 8P, United Concrete Pipe Corp., John Huber, Plant Supt.; Charles Johnston, Const. Supt.

Schedules 2B & 2S, Western Pipe & Steel Co., L. L. White, Supt.

(Dams)

Cajalco dam, The Griffith Co., Harry Davis, Gen. Supt.

Parker dam, Six Cos., Inc., Frank Crowe, Gen. Supt.; E. A. Moritz, Eng. in charge.

Here's real evidence that the job is "getting along." The picture, taken more than ten years ago, August 30, 1926, is of the Beaumont office force of the Colorado River Surveys. From left to right are, Dick Stephens (Office Eng., Banning), B. H. Martin (Elect. Div.), Del Laneville, M. E. McClain, D. B. Flammer, W. E. Olin, J. A. Pohl, Fred Haines (Distribution), H. G. Nickle, Sam Kazerman, C. W. Blodgett, L. R. Gillis, L. L. Meyer, and W. W. Wyckoff.

San Jacinto from Cabazon - East Completed Aug. 21

Excavation of the San Jacinto tunnel from the Cabazon shaft to the east portal station was completed on August 21, according to word received from General Superintendent B. C. Leadbetter. On September 1 the heading had been advanced 170 feet beyond the portal station in a section previously scheduled for open cut.

Recognized as being the most difficult and spectacular section of the entire 392 miles of the Colorado River Aqueduct, the 13-mile tunnel has presented the most stubborn obstacle along the line. However, with the completion of the excavation in this eastern end, the job, in terms of lineal feet excavated, is more than half finished. The section between the Potrero shaft and the west portal was holed through on February 21, 1936 and approximately 2500 feet of concrete invert has already been placed in this part of the tunnel. Work is now in progress on the excavation of the six-mile section between the headings of the Cabazon and Potrero shafts.

The Potrero pioneer was advanced 888 feet during August. Since the District started work on San Jacinto in February, 1935, M.W.D. crews working east from Cabazon have driven 7002 feet.

Aqueduct Days at Pomona Fair to Attract Thousands

With a whoop and a roar the 15th annual Los Angeles County Fair will open its gates on Friday, September 18. Officials of the Fair Association have set aside two days, September 26 and 27 as Colorado River Aqueduct Days. Because these dates come on a regular shut-down period, reports from the field indicate that thousands of "aqueduckers" and their families are planning to attend the big show. It is possible that the District may have an exhibit at the Fair which will illustrate phases of the aqueduct construction work.

Every department of the score of major divisions into which the exposition is divided, has been filled to capacity with more than 35,000 individual entries. This year's Fair will be the largest in its history, with an expected attendance of 600,000 people.

The operation of the Fair and its exhibits will be at its peak during the two Aqueduct Days, and District people will be assured of plenty of action and entertainment during their visit. Foremost American stables will be represented by 1000 horses entered in the 17-day racing meet.

Use of "Picture" and "Green" Cards Defined

With the rapid approach of the fall "pick-up" on the main aqueduct, and increasing work on the distributing system, contractors, District engineers, and workmen, are all interested in the proper method of clearing employees through the District's Labor office.

Aqueduct employees are reminded of the fact that only persons who have been issued certificates of registration (picture cards) may be employed by aqueduct contractors. These cards are issued at the District's Labor office at 770 So. San Pedro St., Los Angeles.

After a man has been cleared as eligible for employment, the Labor office forwards his picture card to the headquarters of the division on which the man has been assigned for contract work. Only after this contract employee has been checked by District inspectors, and identified by comparison with the picture card, is he actually qualified for employment by the contractor. These picture cards cannot be released to contract employees until a period of 15 days has elapsed after the date of issue.

At the time a man is cleared for contract work, he is given a "green" card bearing the contractor's name, the name of the camp, the contractor's requisition number, and the bearer's signature—signed at the Labor office. The "green" card serves simply as a card of introduction. It is *not* an identification card, and cannot be used in place of the picture card. When the "green" card and signature have been checked by the District inspector, the card is picked up and returned to the Labor office.

DIXON-CASE LOW ON HAYFIELD PLANT

L. E. Dixon Co. and Case Construction Co., Inc., Los Angeles contractors, were low bidders on the Hayfield pumping plant with a proposal to construct the buildings and appurtenant works for $1,330,765. The estimated cost of District furnished materials is $233,000.

The contract for the Hayfield plant was the last to be awarded for pumping plants, contracts having previously been let to Winston and Crowell for the Intake and Gene plants to Wood and Bevanda for Iron Mountain, and to L. E. Dixon for the Eagle Mountain plant. The furnishing of the pumps for the plants is not part of these contracts. Hayfield, the farthest west of the five plants, will lift aqueduct water 442 feet.

TUNNELS

August 1 to August 31, 1936

TUNNEL EXCAVATION (MILES)

	Completed	Remaining
Aqueduct	86.16	5.93
Distribution	13.77	2.43
Total	99.93	8.36

*TUNNEL LINING (MILES)

	Completed	Remaining
Aqueduct	55.16	36.93
Distribution	2.94	13.22
Total	58.10	50.15

*Arch considered to equal 0.9 completed section.

TUNNEL PROGRESS

CONTRACTOR	TUNNEL	LENGTH IN FEET	EXCAVATION IN FEET					LINING IN FEET					
			NUMBER OF SHIFTS	AVERAGE PER SHIFT	THIS PERIOD	TOTAL TO DATE	REMAINING	ARCH OR INVERT	NUMBER OF SHIFTS	AVERAGE PER SHIFT	THIS PERIOD	TOTAL TO DATE	REMAINING
AQUEDUCT—CONTRACT													
WALSH CONSTRUCTION CO.	COLORADO RIVER	5,482			Completed	5,482	0	Arch			0	5,475	7
								Invert				5,475	7
	COPPER BASIN NO. 1	705			Completed	705	0	Arch			0	696	9
								Invert			0	696	9
	COPPER BASIN NO. 2	11,568			Completed	11,568	0	Arch			0	11,568	0
								Invert			0	11,568	0
	WHIPPLE MOUNTAIN	(32,238)				(32,238)	(0)	Invert			0	0	(32,238)
	East from Adit	18,336			Completed	18,336	0	Arch	57	65.7	3,745	3,745	14,591
	West from Adit	13,902			Completed	13,902	0	Arch			0	13,898	4
WINSTON BROTHERS	IRON MT. (E. PORTION)	(23.645)				(23,645)	(0)						
	East from Shaft	9,902			Completed	9,902	0	Invert			0	0	9,902
								Arch			0	9,887	15
	West from Shaft	13,743			Completed	13,743	0	Invert			0	172	13,571
								Arch			0	13,728	15
UTAH CONSTRUCTION CO.	IRON MT. (W. PORTION)	16,208			Completed	16,208	0	Arch	18	46.0	828	16,208	0
								Invert				0	16,208
WINSTON BROTHERS	COXCOMB (From E. Portal)	17,795			Completed	17,795	0	Arch				0	17,795
								Invert				0	17,795
BRODERICK & GORDON	E. EAGLE (From W. Portal)	9,440			Completed	9,440	0					0	9,440
	W. EAGLE (E. PORTION)	(15,845)			Completed	(15,845)	(0)	Invert				0	(15,845)
	East from Adit	7,871				7,871	0	Arch				0	7,871
	West from Adit	7,974				7,974	0	Arch	44	62.5	2,751	2,751	5,223
DRAVO CONTRACTING CO.	VALVERDE	(38,015				(38,015)	0						
	East Portal to Shaft 3	21,415			Completed	21,415	0	Arch	0	0	0	38,014	1
	West from Shaft 3				Completed	8,964		Invert	2	116.5	233	38,014	1
	East from Adit	12,067			Completed	3,103	0						
	West from Adit	4,533			Completed	4,533	0						
	TOTALS Ft.	170,941				170,941	0	Arch	119	61.5	7,324	115,970	54,971
	Miles	(32.38)				(32.38)	(0)	Invert	2	116.5	233	55,925	115,016
AQUEDUCT — FORCE ACCOUNT													
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	EAST COACHELLA	(96,605)				(96,605)	0						
	East Portion	28,512			Completed	28,512	0	Arch			0	28,512	0
								Invert			0	28,129	383
	West Portion	68,093			Completed	68,093	0	Arch	73	44.2	3,227	37,441	30,652
								Invert				0	68,093
	1000 PALMS NO. 1 (From W.P.)	16,058				16,058	0	Arch	73	45.4	3,311	4,567	11,491
	1000 PALMS NO. 2	3,838			Completed	3,838	0	Arch			0	3,838	0
								Invert				3,838	0
	WIDE CANYON NO. 1	14,305			Completed	14,305	0	Arch			0	14,305	0
	WIDE CANYON NO. 2	848			Completed	848	0	Arch				848	0
	SEVEN PALMS (From E. Prtl)	4,810				4,810							
	(From W. Prtl)	11,920			Completed	11,920	0	Arch			0	16,730	0
	LONG CANYON	15,305			Completed	15,305	0	Arch	69	93.5	6,453	15,305	0
	BLIND CANYON	6,836			Completed	6,836	0					0	6,836
	MORONGO NO. 1	5,725			Completed	5,725	0					0	5,725
	MORONGO NO. 2	1,902			Completed	1,902	0					0	1,902
	SAN JACINTO	(68,639)				*(37,414	(31,381)					0	(68,639)
	Cabazon Shaft to East Portal	8,653	93	6.0	554	*8,809	—						
	Cabazon to Lawrence	26,817	93	1.8	168	9,204	17,613						
	Cabazon Pioneer	18,119	93	2.9	271	603	17,516						
	Lawrence Adit	5,651	93	1.7	162	1,167	4,484						
	Potrero Pioneer	15,163	93	9.5	888	1,612	13,551						
	Potrero to Lawrence	17,670	93	6.9	638	3,902	13,768						
	Potrero Shaft to West Portal	15,499			Completed	15,499	0	Invert	2	184.5	369	2,294	66,345
	TOTALS Ft.	246,791	279	4.9	1,360	*215,566	31,381	Arch	215	60.4	12,991	121,546	125,245
	Miles	46.74			(0.26)	(40.83)	(5.93)	Invert	2	184.5	369	34,261	212,530

*Include 156 feet excavated beyond original East Portal.

DISTRIBUTION—CONTRACT

GRIFFITH CO.	CAJALCO OUTLET	2,439	44	9.4	415	1,614	825					0	2,439
WEST CONSTRUCTION CO.	MONROVIA NO. 1 (From W.P.)	7,868		Completed		7,868	0		67	22.2	1,480	2,280	5,515
	MONROVIA NO. 2 (From Jct. 1)	940		Completed		940	0					0	855
	MONROVIA NO. 3	(32,105)			1,727	26,133	5,972					0	(32,069)
	East from Adit	11,340	88	9.3	820	9,990	1,350						
	West from Adit		79	6.3	496	4,426							
	From West Portal	20,765	86	4.8	411	11,717	4,622						
DIXON, BENT BROS. & JOHNSON	MONROVIA NO. 4 (From W.P.)	8,096	69	7.7	532	3,857	4,239					0	8,084
J. F. SHEA CO., Inc.	SIERRA MADRE (From E. Prtl)	6,700		Completed		6,700	0		63	19.9	1,253	6,469	231
DIXON, BENT BROS. & JOHNSON	PASADENA EAST	5,546		Completed		5,546	0		28	24.5	687	5,546	0
	PASADENA (From West Portal)	12,140		Completed		12,140	0		52	22.9	1,193	1,193	10,947
	SAN RAFAEL No. 1 (From W.P.)	4,040		Completed		4,040	0					0	4,040
	SAN RAFAEL No. 2 (From E.P.)	5,669	78	7.7	601	3,867	1,802					0	5,669
	TOTALS Ft.	85,543	444	7.4	3,275	72,705	12,838	Full Section	210	22.0	4,613	15,488	69,849
	Miles	(16.20)			(0.62)	(13.77)	(2.43)				(0.88)	(2.94)	(13.22)

TION PROGRESS

CANAL, CONDUIT, SIPHON & PIPE LINES

August 16 to August 29, 1936

CANAL, CONDUIT AND SIPHON (MILES)

	Completed	Remaining
Excavation	115.97	29.75
Concrete	105.18	39.48
Back Fill	49.55	32.91

DISTRIBUTION PIPE LINE (MILES)

	Completed	Remaining
Excavation	10.11	31.47
Concrete	8.37	33.21
Back Fill	7.36	34.22

AQUEDUCT

SCHED. NO.	CONTRACTOR	FEATURES	Length In Feet	EXCAVATION—Feet			CONCRETE—Feet			BACKFILL—Feet		
				Period	To Date	Remain'g	Period	To Date	Remain'g	Period	To Date	Remain'g
1	AQUEDUCT CONSTR. CO.	Conduit and Siphons	22,025	0	22,025	0	0	22,025	0	0	22,025	0
2	BARRETT & HILP AND MACCO CORP.	Conduit and Siphons	30,569	0	29,314	1,255	0	24,584	5,985	0	22,400	8,169
3		Canal and Siphons	40,499	0	39,574	925	0	32,104	8,395	0	1,390	10,955
4	JAHN & BRESSI CONSTR. CO.	Canal and Siphons	53,218	0	53,218	0	0	53,218	0	0	1,992	1,083
5		Canal and Siphons	53,588	0	53,588	0	0	53,588	0	0	2700	1,320
6	WOOD AND BEVANDA	Siphon	15,521	0	15,521	0	0	15,521	0	0	13,043	2,478
7	BARRETT & HILP & MACCO CORP.	Canal and Conduit	27,707	0	27,707	0	0	27,707	0	0	12,170	0
8	WOOD AND BEVANDA	Canal and Siphons	49,579	0	49,579	0	0	49,174	405	0	7,090	800
9	UTAH CONSTRUCTION CO.	Canal, Conduit and Siphons	47,360	86	45,874	1,486	0	44,074	3,286	0	1,975	4,221
10	AQUEDUCT CONSTR. CO.	Canal and Siphons	44,505	0	44,505	0	0	44,505	0	0	3,594	1,256
11		Canal, Conduit and Siphons	44,002	1,980	10,110	33,892	0	0	44,002	0	0	10,322
12	THREE COMPANIES, INC.	Conduit and Siphons	32,977	0	28,789	4,188	0	24,652	8,325	0	23,030	9,947
13	AQUEDUCT CONSTR. CO	Canal, Conduit and Siphons	31,965	0	24,696	7,269	0	11,782	20,183	0	0	3,665
14	THOMPSON-STARRETT CO.	Conduit and Siphons	32,366	0	32,366	0	0	32,366	0	0	32,366	0
15		Conduit and Siphons	35,849	0	423	35,426	0	403	35,446	0	0	35,849
16		Conduit and Siphons	19,359	0	0	19,359	0	0	19,359	0	0	19,359
17	M. W. D.—FORCE ACCT.	Conduit and Siphons	21,961	424	16,687	5,274	35	12,608	9,353	0	10,843	11,118
18	J. F. SHEA CO., INC.	Conduit and Siphons	27,537	525	17,475	10,062	0	13,660	13,877	0	13,660	13,877
18J	MORRISON-KNUDSEN CO.	Siphons	9,809	0	9,809	0	0	9,809	0	0	9,809	0
19	J .F. SHEA CO., INC.	Conduit and Siphons	37,364	0	0	37,364	0	0	37,364	0	0	37,364
20		Siphons	18,618	0	18,618	0	0	18,618	0	0	18,618	0
20 A & B	M. W. D.—FORCE ACCT.	Siphons	735	0	705	30	0	0	735	0	0	735
21	GRIFFITH COMPANY (Outlet Channel Unlined)	Siphons	14,613	0	14,613	0	0	14,613	0	0	14,613	0
22		Siphons	7,229	0	7,229	0	0	7,229	0	0	7,229	0
23		Conduit and Outlet Channel	38,695	55	38,690	5	0	33,145	0	0	33,145	0
3	WINSTON BROS. CO. & WILLIAM C. CROWELL	Siphon (Gene Inlet)	1,877	0	1,676	201	0	589	1,288	0	530	1,268
4		Siphon (Copper Basin)	450	0	116	334	0	0	450	0	0	0
	TOTALS		759,977	3,070	602,907	157,070	35	545,974	208,453	0	252,222	173,786

DISTRIBUTION PIPE LINES

1	AMER. CONC. & STL. PIPE CO.	Precast Concrete Pipe	12,227	0	0	12,227	0	0	12,227	0	0	12,227
2	WESTERN PIPE & STL. CO.	Welded Steel Pipe	54,530	1,657	15,096	39,434	1,757	6.090	48,440	1,418	4,236	50,294
3	AMER. CONC & STL. PIPE CO.	Precast Concrete Pipe	20,124	0	0	20,124	0	0	20,124	0	0	20,124
4			25,867	2,304	23,476	2,391	2,303	23,439	2,428	2,292	22,626	3,241
5			24,895	0	0	24,895	0	0	24,895	0	0	24,895
6	J. F. SHEA CO., Inc.	Precast Concrete Pipe	27,348	1,220	3,704	23,644	1,355	3,674	23,674	1,396	2,216	25,132
7			30,044	0	0	30,044	0	0	30,044	0	0	30,044
8	UNITED CONC. PIPE CORP.	Precast Concrete Pipe	24,525	2,200	11,117	13,408	2,479	11,011	13,514	2,371	9,772	14,753
	TOTALS		219,560	7,381	53,393	166,167	7,894	44,214	175,346	7,477	38,850	180,710

MISCELLANEOUS CONSTRUCTION

August 16 to August 29, 1936

AQUEDUCT PUMPING PLANTS AND APPURTENANT WORKS

CONTRACTOR	FEATURES	EXCAVATION—Cu. Yds.				CONCRETE—Cu. Yds.				STEEL—Tons			
		Est.Quan.	Period	To Date	%	Est.Quan.	Period	To Date	%	Est.Quan.	Period	To Date	%
WINSTON BROS. CO. & WILLIAM C. CROWELL	Intake Plant	102,400	2,500	88,845	86.8								
	Gene Plant	92,600	101	79,573	85.9	13,370	0	1,044	7.8	2,052	0	7.0	0.3
WOOD AND BEVANDA	Iron Mt. Plant	358,700	0	224,245	62.5	19,897	0	55	0.3	1,707	0.6	0.6	0.1
L. E. DIXON CO.	Eagle Plant	227,695	10,445	111,284	48.9	21,122	0	650	18.9	2,160	0	37.4	1.7
NOT AWARDED	Hayfield Plant												
	TOTALS		13,046	503,948			0	1,749			0.6	45.0	

BOULDER TRANSMISSION LINE—FRITZ ZIEBARTH

FEATURES	Length-Line Mi.	Period	To Date	Percent
Footings Constructed	237.0	2.0	166.0	70.0
Towers Erected	237.0	20.3	81.0	34.2
Wire Strung	237.0	9.0	39.0	16.4

TELEPHONE LINES—NEWBERY ELECTRIC CO.

FEATURES	Length-Line Mi.	Period	To Date	Percent
Converting Spur to Truck Line	7.8	0	7.8	100
Constructing New Trunk Line	139.5	0	139.5	100

PARKER RESERVOIR—SIX COMPANIES, INC.

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnels—Excav.	3,463 Ft.	0	3,463	100
Diversion Tunnels—Concrete	3,363	0	3,363	100
Dam Excavation	1,391,000 C.Y.	4,500	280,403	20.2
Dam Concrete	277,900 C.Y.	0	0	0

CAJALCO RESERVOIR—GRIFFITH COMPANY

FEATURES	Est. Quan.	Period	To Date	Percent
Diversion Tunnel	2,000 Ft.	0	2,000	100
Dam & Dike Excavation	651,000 C.Y.	69,360	366,830	56.3
Dike Fill	4,113,000 C.Y.	14,720	3,036,900	73.8
Dam Fill	3,410,000 C.Y.	80,200	470,100	13.8

COMPLETED FEATURES

TUNNELS

CONTRACTOR	TUNNEL	Length in Miles	Work Started	Work Completed
MORRISON-KNUDSEN CO.	Mecca Pass, No. 1, 2 & 3	1.13	7-17-33	2-10-35
WEST CONSTRUCTION CO.	Whitewater Nos 1 & 2	1.94	7-18-33	4-15-35
SHOFNER & GORDON	Hayfield No. 2	1.03	7-8-33	7-27-35
HAMILTON & GLEASON	Bernasconi	1.18	4-19-33	11-21-35
J. F. SHEA CO., INC.	Cottonwood	3.81	6-14-33	12-29-35
HUNKIN-CONKEY CON. CO.	Hayfield No. 1	1.84	10-21-33	1-9-36
DIXON & BENT BROS.	W. Eagle-W. Por.	2.02	9-8-33	3-12-36
	TOTALS	12.95		

CANAL, CONDUIT AND SIPHON

CONTRACTOR	FEATURE AND NAME OR SCHEDULE	Length in Miles	Work Started	Work Completed
UNITED CONC. PIPE CO.	LITTLE MORONGO SIPHON	0.13	2-27-34	8-20-34
M.W.D.—FORCE ACCT.	FAN HILL COND. & SIPHON	0.32	10-21-33	11-19-34
GRIFFITH COMPANY	SCHEDULE NO. 20-C	1.33	5-3-35	9-14-35
	TOTALS	1.78		

115 Joints Placed in Six Days - New Record by United

Placing 115 twenty-nine-ton sections of precast concrete pipe, totaling 1380 feet in length, in six days, the United Concrete Pipe Company crews on schedule No. 8 of the Distribution System have established what is thought to be a world's record in the laying of large diameter pipe. The record was made during the six-day period ending August 21.

Despite the fact that each of the pipe sections, which are 12 feet long and have an inside diameter of 10 feet 3 inches, weighs more than a standard box car, the crane operators, Lazo Petrovich and C. R. Donati, working under the direction of Foreman Nick Bon, and Superintendent C. H. Johnston, placed 24 of the joints in one day. R. J. "Red" Irvine is the District's placing inspector on the job.

The concrete pipe, which has a combined cage and cylinder type of reinforcement, is cast at the United's new plant at Baldwin Park from where it is transported by truck and trailer to the trench. Schedule 8 is in the general vicinity of Glendora, and when completed, this section of the Distribution upper feeder will hook into the east portal of Monrovia tunnel No. 1.

DECORATIVE ART BOOK BY MRS. C. E. SIDES

"Decorative Art of the Southwestern Indians," is the title of a new book recently published by Mrs. C. E. Sides, wife of "Tim" Sides, Superintendent at Cabazon. Printed by the Fine Arts Press of Santa Ana, the edition is limited to 450 volumes which sell for $17.50 each. It is in portfolio form, and consists of 50 plates with hundreds of intricate and beautiful designs printed in black and white and then water colored by Mrs. Sides in all of the original Indian colors.

The book, on display at Dawson's Book Shop and Robinson's in Los Angeles, was edited by Dr. Frederick Webb Hodge, Director of the Southwest Museum, and the annotations were written by Mrs. Sides' mother. "Tim" Sides states that he contributed moral support only.

Mrs. Sides is a graduate of the Bevier School of Art in Rochester, and spent four years in Europe doing reproductions of tapestries and miniatures.

This picture, taken at night, shows part of the gardens at Division 3 Headquarters illuminated by floodlights.

When Division 3 headquarters camp was established, just three years before the picture was taken, its only decorative features were the Coxcomb and Eagle Mountains, neither of which could accurately be called part of the camp layout. Today, Division 3 headquarters is truly one of the beauty spots of the desert, rivaling ("excelling," is the word, says John Stearns) Palm Springs and other winter resorts. In addition to the trees, and lawns, and cactus gardens, it has more than 50 varieties of flowers and shrubs, none of which is native to the desert.

OH BLOW THE MAN DOWN

The line from the sailor's chanty may be all well and good, but Johnny (Skipper) Keigan, chief put'em and find'em expert of the L. A. blueprint files, is looking for a tune for his version, to the effect "Oh Blow the Man Up." Johnny is the proud owner, captain, and crew of a "snipe" (it's a type of sail boat) which lists San Pedro as its home port. Recently he entered the craft in the sailing races in Balboa Bay. Going down was fine—he made it in a shade under 24 hours. After the regatta he tried once, twice and thrice, on three separate week-ends, to coax the snipe back up the coast to the home berth, but old man "head winds" had different ideas. Due to the fact that he's used up all of his annual leave, Keigan has now transferred his membership from the San Pedro to the Balboa Yacht Club.

New Safety Contest Berdoo vs. Banning Shops and Stores

The Banning and Berdoo general machine shops and other employees have entered into a safety contest to determine the relative merits of these two groups in accident prevention, according to word received from Safety Engineer T. W. Osgood.

Participating in the contest will be employes in the following units: Banning-San Jacinto General Machine Shop and General Store; Operating Department. Carrying the ball for Berdoo will be: Coachella General Machine Shop and "Bull Gang"; Coachella General Store.

Beginning with the September, 1936, record, a safety flag will be awarded to Banning or Berdoo on the basis of the lowest lost-time accident frequency rate. If neither unit reports a lost-time accident during the month, duplicate awards will be made. The display of flags during subsequent months will be governed by the respective monthly records.

These forces have maintained splendid safety records, and barring accidents (no pun intended), indications are that the awards will be hotly contested.

AQUEDUCT FEATURED IN NEW TEXTBOOK

Featuring the Colorado River Aqueduct as the greatest construction project of the present day, and as typifying engineering of the modern era, a new textbook, to be released early in 1937 by Bobbs-Merrill Company, will describe in detail the construction of the giant water supply system, according to an announcement by the book's author, Irving R. Melbo.

Being published for distribution to grade schools throughout the United States, the book will cross-section the arts, sciences, and industries of modern society. A section of the new textbook will be given to each classification. The section on Engineering will be devoted to the Metropolitan Water District Aqueduct. Melbo stated, "The Colorado River Aqueduct represents the modern era of engineering, as well as being the greatest construction project in the country today."

Senior Engineer O. J. Schieber has left the green Perris Valley of Division 6 in favor of Division 4 headquarters at Berdoo.